



Modbus Protocol eyc-tech FUM03 Clamp- on Ultrasonic Flow



Firmware Version v1.2 Applicable

Function	Address		Default	R/W	Type	Notes
MODBUS Address	0x0000	0	1	RW	uint16	1~247 (Effective after restart)
Baud Rate	0x0001	1	2	RW	uint16	0:9600, 1:19200, 2:38400, 3:115200 (Effective after restart)
Parity	0x0002	2	0	RW	uint16	0: NONE, 1: EVEN, 2:ODD (Effective after restart)
Product SN	0x0003	3	0	R	string	e.g. SN: ECT001001
	0x0004	4				
	0x0005	5				
	0x0006	6				
	0x0007	7				
Flow	0x0008	8	-	R	int32	e.g. Read 1234 = 12.34 (L/min)
	0x0009	9				e.g. Read 1234 = 1.234 (m³/h)
Cumulative Flow Integer	0x000A	10	-	R	uint32	e.g. Read 1234 = 1234 (L)
	0x000B	11				
Cumulative Flow Decimal	0x000C	12	-	R	uint16	e.g. Read 1234 = 0.1234
Temperature	0x000D	13	-	R	int16	e.g. Read 234 = 23.4°C
Signal Strength	0x000E	14	-	R	uint16	0~100%
Upper Peak Value	0x000F	15	-	R	uint32	e.g. Read 1234 = 12.34 (L/min) e.g. Read 1234 = 1.234 (m³/h)
	0x0010	16				
Lower Peak Value	0x0011	17	-	R	uint32	
	0x0012	18				
Single Batch Flow Integer	0x0013	19	-	R	uint32	e.g. Read 1234 = 1234 (L)
	0x0014	20				
Single Batch Flow Decimal	0x0015	21	-	R	uint16	e.g. Read 1234 = 0.1234
Extension Module Value	0x0016	22	-	R	int32	
	0x0017	23				
System Unit	0x0100	256	0	RW	uint16	0:mm, 1:in
Temperature Unit	0x0101	257	0	RW	uint16	0:°C, 1:°F
Flow Unit	0x0102	258	0	RW	uint16	0:L/min, 1:m³/h, 2:gal/min(US)
Cumulative Unit	0x0103	259	0	RW	uint16	0:L, 1:m³, 2:gal(US)
Clear Cumulative	0x0104	260	-	W		Write any value to clear
Clear Peak Value	0x0105	261	-	W		Write any value to clear
Clear Single Batch	0x0106	262	-	W		Write any value to clear
Time	0x0107	263	-	RW	uint32	Format: unixtime
	0x0108	264				Writing will clear historical data
Response Time	0x0109	265	0	RW	uint16	0:0.5s, 1:1.0s, 2:2.5s, 3:5.0s, 4:10.0s, 5:30.0s

Pipe Outer Diameter	0x010A	266	As per spec	RW	uint16	e.g. mm: 1234 = 12.34 mm
Pipe Wall Thickness	0x010B	267	As per spec	RW	uint16	e.g. in: 12345 = 1.2345 in
Pipe Material	0x010C	268	0	RW	uint16	0:PVC, 1:Carbon Steel, 2:Stainless Steel, 3: Copper, 4:PVDF, 5: PFA, G:PTFE, 7:PU, 8:Aluminum
Fluid Type	0x010D	269	0	RW	uint16	0:Water, 1:Sea water, 2:Oil, 3:Other
Other Fluid Sound Velocity	0x010E	270	1496	RW	uint16	300m/s ~ 1900m/s
Flow Direction	0x010F	271	0	RW	uint16	0: URWard(LED direction), 1:Downward(Cable direction)
Flow Format	0x0110	272	As per spec	RW	uint16	L/min: 0:x1, 1:x0.1, 2:x0.01 m³/h: 0:x1, 1:x0.1, 2:x0.01, 3:x0.001
Cumulative Format	0x0111	273	As per spec	RW	uint16	L: 0:x1, 1:x0.1, 2:x0.01 m³: 2:x0.01, 3:x0.001, 4:x0.0001
Rotation Direction	0x0112	274	0	RW	uint16	0:Rotate 0°, 1:Rotate 90°, 2:Rotate 180°, 3:Rotate 270°
Display Averaging	0x0113	275	1	RW	uint16	0~10s
Display Brightness	0x0114	276	80	RW	uint16	10~100%
Sleep Mode	0x0115	277	0	RW	uint16	0: Off, 1: On
Indicator Mode	0x0116	278	0	RW	uint16	0: Switch Synchronous, 1: Relay Synchronous
Indicator Color	0x0117	279	0	RW	uint16	0: Off → Green, 1: Red → Green, 2: Off
Language Setting	0x0118	280	0	RW	uint16	0: English, 1: Traditional Chinese
Analog Output Mode	0x0119	281	0	RW	uint16	0: 1~5V, 1: 0~10V, 2: 4~20mA, 3: 0~ 20mA
Analog Upper Limit	0x011A	282	As per spec	RW	int32	Range: ±9999.99 L/min
	0x011B	283				
Analog Lower Limit	0x011C	284	As per spec	RW	int32	
	0x011D	285				
Switch Output Mode	0x011E	286	1	RW	uint16	0: Not Used, 1: Standard Output, 2: Window Output, 3: Cumulative Output, 4: Pulse Output, 5: Error Output, 6: No Signal Output
Switch Output Type	0x011F	287	0	RW	uint16	0:NPN, 1:PNP
Switch Output Inversion	0x0120	288	0	RW	uint16	0: Off, 1: On
Switch Output Upper Limit / Setting Value	0x0121	289	As per spec	RW	int32	Switch between read/set values depending on mode Standard/Window Output: 0 ~ 9999.99 L/min Cumulative Output: 0.10 ~ 999999.99 L
	0x0122	290				Pulse Output: 0.10 ~ 999.99 L
Switch Output Lower Limit	0x0123	291	As per spec	RW	int32	
	0x0124	292				
Relay Output Mode	0x0125	293	0	RW	uint16	0: Not Used, 1: Standard Output, 2: Window Output, 3: Cumulative Output, 5: Error Output, 6: No Signal Output
Relay Output Inversion	0x0126	294	0	RW	uint16	0: Off, 1: On
Relay Output Upper Limit / Setting Value	0x0127	295	As per spec	RW	int32	Switch between read/set values depending on mode Standard/Window Output: 0 ~ 9999.99 L/min Cumulative Output: 0.10 ~ 999999.99 L
	0x0128	296				
Relay Output Lower Limit	0x0129	297	As per spec	RW	int32	

	0x012A	298				
Hysteresis Setting	0x012B	299	As per spec	RW	int32	Range: 0 ~ 9999.99L/min
	0x012C	300				
Flow Simulation Switch	0x012D	301	0	RW	uint16	0: Off, 1: On
Flow Simulation Value	0x012E	302	As per spec	RW	int32	Range: ±9999.99L/min
	0x012F	303				
Meter Factor	0x0130	304	1000	RW	uint16	e.g. Read 1000= 1.000
Static Zero Control	0x0131	305	-	W	uint16	Write 1 to sample immediately (if writing fails, please confirm the flow is stable before retrying), write 2 to clear
Low Flow Cutoff Value	0x0132	306	As per spec	RW	int32	Range: 0 ~ 9999.99L/min
	0x0133	307				
Temperature Offset	0x0134	308	0	RW	uint16	±35 °C
Temperature Coefficient	0x0135	309	1000	RW	uint16	Range: 0.100 ~ 10.000 e.g. Read 1000= 1.000
Analog Output Calibration Control	0x0136	310	0	RW	uint16	Write 0 to exit calibration mode, read value 1 indicates calibration mode active
Analog Output Calibration Voltage 1V	0x0137	311	-	RW	uint16	Default is factory calibration value Write range: 0~32767 Write any value to enter calibration mode
Analog Output Calibration Voltage 5V	0x0138	312	-	RW	uint16	
Analog Output Calibration Voltage 10V	0x0139	313	-	RW	uint16	
Analog Output Calibration Current 4mA	0x013A	314	-	RW	uint16	
Analog Output Calibration Current 20mA	0x013B	315	-	RW	uint16	
Extension Module Signal	0x013C	316	0	RW	uint16	0: Not Used, 1: 4~20mA, 2: 1~5V
Extension Module Unit	0x013D	317	%	RW	string	4-character string
	0x013E	318				
Extension Module Upper Limit	0x013F	319	1000	RW	int32	Keep two decimal places, range: ±9999.99
	0x0140	320				
Extension Module Lower Limit	0x0141	321	0	RW	int32	
	0x0142	322				
Restart	0x0143	323	-	W	uint16	Write any value to execute
Initialize Settings	0x0144	324	-	W	uint16	Write any value to execute
Delete Historical Data	0x0145	325	-	W	uint16	Write any value to execute
Factory Reset	0x014G	326	-	W	uint16	Write any value to execute
Screen Lock	0x0147	327	-	RW	uint16	0: Off, 1: On

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